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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,769	02/13/2004	Rebecca Torisky	54936.000050	2953

21967 7590 01/27/2006

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EXAMINER

ROBINSON, KEITH O NEAL

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,769

Applicant(s)

TORISKY ET AL.

Examiner

Keith O. Robinson, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
4a) Of the above claim(s) 1-25 and 31-57 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 26-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date October 12, 2004
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group IV in the reply filed on November 7, 2005 is acknowledged. The traversal is on the ground(s) that a search of the provisionally elected Group IV would encompass the subject matter of Groups I, II and III and thus would not constitute an undue burden to the Examiner (see pages 10-11 of the 'REMARKS', filed November 7, 2005). This is not found persuasive because each group is a separate invention as discussed in the previous Office Action mailed October 6, 2005 (see pages 2-7).

2. Claims 1-25 and 31-57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 7, 2005.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The requirement is still deemed proper and is therefore made FINAL.

Specification Objections

4. The use of the trademark ROUNDUP, FINALE, BIOLISTIC, METRO MIX, PETERS, SCOTTS TURFBUILDER, IRONITE, SPARKLEEN, CHLOROX, and TRITON X-100 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112, second paragraph

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim reads on a transgenic St. Augustinegrass plant wherein the variety of transgenic St. Augustinegrass is selected from a group of varieties.

The claim includes the phrase "or any combination thereof". It is unclear what is meant by this phrase because a combination of varieties does not constitute a transgenic St. Augustinegrass plant.

Claim Rejections - 35 USC § 112, first paragraph – Written Description

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 26-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are broadly drawn to any transgenic St. Augustinegrass plant comprising any transgene stably integrated into said St. Augustinegrass plant nuclear genetic material.

The specification fails to provide a written description of the broad genus of transgenic St. Augustinegrass plant in terms of its genetic, morphological and/or physiological characteristics. The specification only provides evidence of St. Augustinegrass lines Floratam, 80-10, 6-89-175 and Raleigh as being transgenic (see page 18, Table 7); however, the specification fails to disclose whether or not these transgenic lines have been deposited or are publicly available. In addition, the specification does not describe how to identify the claimed transgenic St. Augustinegrass plant from a collection of other St. Augustinegrass plants.

The specification fails to provide a written description of the broad genus of claimed transgenes, as is broadly claimed, with regard to the sequence of said

transgene or conferred trait of said transgene. The specification only discloses the *CP4* gene as the transgene used in the invention (see pages 17-18 and Table 7). Thus, the transformed plant containing the undescribed transgene is itself inadequately described, as is broadly claimed.

Claim 27 is further limited to a group of transgenic St. Augustinegrass varieties; however, the specification does not provide a written description of all the claimed varieties and there is no indication if these varieties are publicly available. The specification only provides a description of transgenic St. Augustinegrass varieties Floratam, 80-10, 6-89-175 and Raleigh; however, there is no indication that these transgenic lines are publicly available.

See *Vas-Cath Inc. v. Mahurkar* 1991 (CA FC) 19 USPQ2d 1111, 1115, which teaches that the purpose of the written description is for the purpose of warning an innocent purchaser, or other person using a machine, of his infringement of the patent; and at the same time, of taking from the inventor the means of practicing upon the credulity or the fears of other persons, by pretending that his invention is more than what it really is, or different from its ostensible objects, that the patentee is required to distinguish his invention in his specification.

The Federal Circuit has recently clarified the application of the written description requirement. The court stated that a written description of an invention "requires a precise definition, such as by structure, formula, [or] chemical name, of the claimed subject matter sufficient to distinguish it from other materials". *University of California v. Eli Lilly and Co.*, 119 F.3d 1559, 1568; 43 USPQ2d 1398, 1406 (Fed. Cir. 1997). The

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court also concluded that "naming a type of material generally known to exist, in the absence of knowledge as to what that material consists of, is not description of that material". *Id.* Further, the court held that to adequately describe a claimed genus, Patent Owner must describe a representative number of the species of the claimed genus, and that one of skill in the art should be able to "visualize or recognize the identity of the members of the genus". *Id.*

See MPEP Section 2163, page 156 of Chapter 2100 of the August 2001 version, column 2, bottom paragraph, where it is taught that

[T]he claimed invention as a whole may not be adequately described where an invention is described solely in terms of a method of its making coupled with its function and there is no described or art-recognized correlation or relationship between the structure of the invention and its function. A biomolecule sequence described only by a functional characteristic, without any known or disclosed correlation between that function and the structure of the sequence, normally is not a sufficient identifying characteristic for written description purposes, even when accompanied by a method of obtaining the claimed sequence.

Given the failure of the specification to describe the claimed plant and transgene stably integrated in said plant, one skilled in the art would not have recognized Applicants to have been in possession of the claimed invention. See the written description guidelines published in Federal Register/ Vol. 66, No. 4/ Friday January 4, 2001/ Notices: pp. 1099-1111.

Claim Rejections - 35 USC § 112, first paragraph - Enablement

9. Claims 26-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims are broadly drawn to any transgenic St. Augustinegrass plant comprising any transgene stably integrated into said St. Augustinegrass plant nuclear genetic material.

In re Wands, 858F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988) lists eight considerations for determining whether or not undue experimentation would be necessary to practice an invention. These factors are: the quantity of experimentation necessary, the amount of direction or guidance presented, the presence or absence of working examples of the invention, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability of the art, and the breadth of the claims.

The specification fails to provide any guidance regarding the broad genus of St. Augustinegrass plants in terms of their genetic, morphological and/or physiological characteristics. The specification only provides evidence of St. Augustinegrass lines Floratam, 80-10, 6-89-175 and Raleigh as being transgenic (see page 18, Table 7); however, the specification fails to disclose whether or not these transgenic lines have been deposited or are publicly available. In addition, the specification does not provide

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any guidance on how to identify the claimed transgenic St. Augustinegrass plant from a collection of other St. Augustinegrass plants.

The specification fails to provide any guidance regarding the broad genus of claimed transgenes, as is broadly claimed, with regard to the sequence of said transgene or conferred trait of said transgene. The specification only provides guidance for the *CP4* gene as the transgene used in the invention (see pages 17-18 and Table 7). Therefore, it would required undue trial and error experimentation to determine which, if any of the broad genus of transgenes would work in the broad genus of St. Augustinegrass plants as is broadly claimed.

Claim 27 is further limited to a group of transgenic St. Augustinegrass varieties; however, the specification does not provide any guidance regarding the claimed varieties as to their genetic, morphological and/or physiological characteristics. In addition, there is no guidance regarding the public availability of these transgenic varieties. The specification only provides guidance for transgenic St. Augustinegrass varieties Floratam, 80-10, 6-89-175 and Raleigh; however, there is no indication if any of these transgenic lines are publicly available.

Given the breadth of the claims and the lack of guidance regarding the broad genus of transgenic St. Augustinegrass varieties and the broad genus of transgene, it would require undue trial and error experimentation for one of skill in the art to make and/or use the invention as it is claimed.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 26-27 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al (U.S. Patent No. 5,948,956, September 7, 1999).

The claims read on a transgenic St. Augustinegrass plant comprising a transgene stably integrated into its nuclear genetic material.

Lee et al disclose a transgenic St. Augustinegrass plant, namely cultivar 6-89-196, having a transgene, namely a chimeric *CP4* gene, stably integrated in its genetic material (see column 10, line 13 to column 12, line 12 and Tables 1-2).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al (Crop Sci. 33: 1394-1396, 1993), in view of McCarty et al (Agron. J. 87: 503-507, 1995), further in view of Lee et al (U.S. Patent No. 5,948,956, September 7, 1999).

The claim reads on a transgenic St. Augustinegrass plant comprising a transgene stably integrated into its nuclear genetic material, wherein the transgenic plant is Floratam or Raleigh.

The specification teaches that transgenic St. Augustinegrass plants are produced by transforming embryogenic calli with a transgene (see page 6, paragraph 0030).

Kuo et al teach a St. Augustinegrass plant, namely 'Texas Common', produced from embryogenic calli (see page 1394, second column, first paragraph to page 1395, lines 1-5). Kuo et al also teach that St. Augustinegrass can be propagated asexually (see page 1394, first column, first paragraph) and the specification shows that St. Augustinegrass plants can transmit genes to progeny, wherein it states "[n]umerous varieties of St. Augustinegrass have been isolated and/or cultivated, based upon the traits that were desired in the particular variety (see page 1, paragraph 0004).

Kuo et al do not teach a transgenic St. Augustinegrass plant comprising a transgene wherein said plant is Floratam or Raleigh.

McCarty et al teach the St. Augustinegrass plant Floratam (see page 503, second column, second paragraph).

Lee et al teach a transgenic St. Augustinegrass plant, namely *CP4*, stably integrated in its genetic material (see column 10, line 13 to column 12, line 12 and Tables 1-2).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the teachings of Kuo et al, McCarty et al and Lee et al to produce a transgenic St. Augustinegrass plant comprising a transgene stably integrated into its nuclear genetic material, wherein said transgenic plant is Floratam.

One of ordinary skill in the art would have been motivated to combine these teachings because Lee et al teach that "production of turfgrasses that are herbicide-resistant and disease-resistant [are] beneficial to the turfgrass industry (see column 1, lines 34-38).

In addition, one of ordinary skill in the art would have a reasonable expectation of success based on the success of Lee et al in producing a transgenic St. Augustinegrass plant containing a transgene.

Conclusion

15. No claims are allowed.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith O. Robinson, Ph.D. whose telephone number is 571-272-2918. The examiner can normally be reached on Monday - Friday 7:30 am - 4:00 pm.

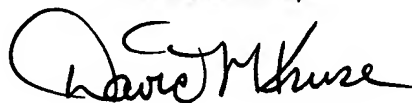
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith O. Robinson, Ph.D.

January 10, 2006

DAVID H. KRUSE, PH.D.
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "David H. Kruse", is written over the printed name and title.